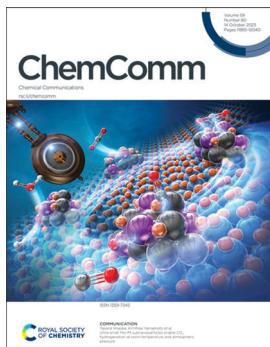


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ISSN 1359-7345 CODEN CHCOFS 59(80) 11885–12040 (2023)



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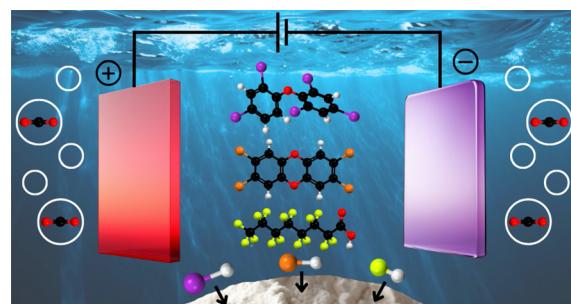
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HIGHLIGHT

11895

Advanced electrocatalytic redox processes for environmental remediation of halogenated organic water pollutants

Madeleine K. Wilsey, Teona Taseska, Ziyi Meng,
Wanqing Yu and Astrid M. Müller*

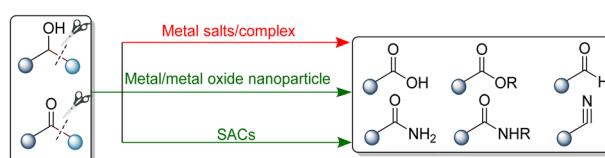


FEATURE ARTICLES

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Aerobic oxidative C–C bond cleavage and functionalization for the synthesis of value-added chemicals

Peng Zhou, Ziliang Yuan, Jie He, Tingfeng Fang,
Bing Liu* and Zehui Zhang*



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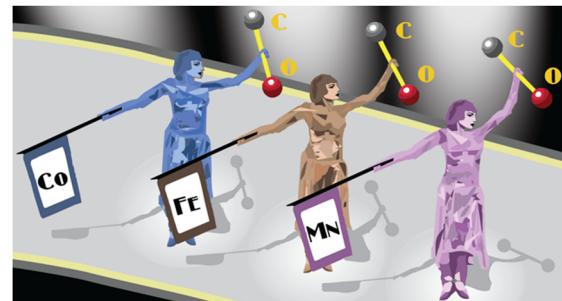
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Activation of robust bonds by carbonyl complexes of Mn, Fe and Co

Maxim R. Radzhabov and Neal P. Mankad*

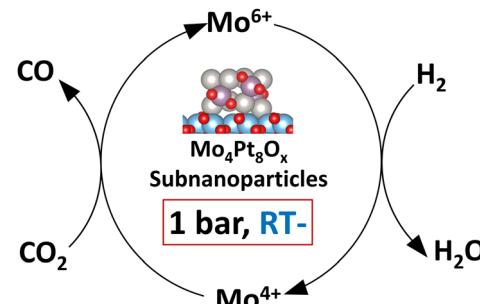


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Ultra-small Mo–Pt subnanoparticles enable CO₂ hydrogenation at room temperature and atmospheric pressure

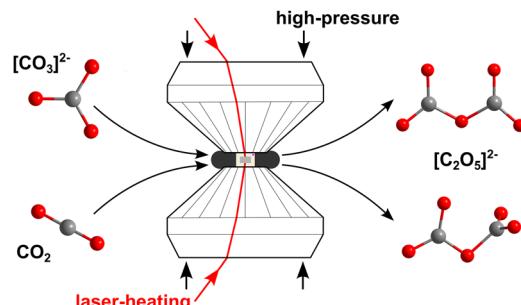
Augie Atqa, Masataka Yoshida, Masanori Wakizaka, Wang-Jae Chun, Akira Oda, Takane Imaoka* and Kimihisa Yamamoto*



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Twisted [C₂O₅]²⁻-groups in Ba[C₂O₅] pyrocarbonate

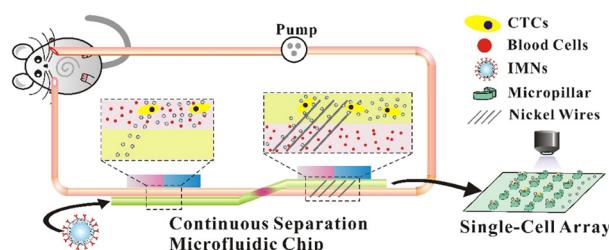
Dominik Spahr,* Lkhamsuren Bayarjargal, Eiken Haussühl, Rita Luchitskaia, Alexandra Friedrich, Victor Milman, Timofey Fedotenko and Björn Winkler



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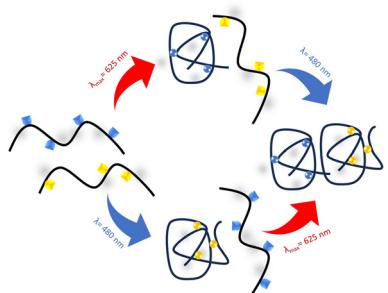
Continuous magnetic separation microfluidic chip for tumor cell *in vivo* detection

Man Tang, Jiao Feng, Hou-Fu Xia, Chun-Miao Xu, Ling-Ling Wu, Min Wu, Shao-Li Hong, Gang Chen* and Zhi-Ling Zhang*



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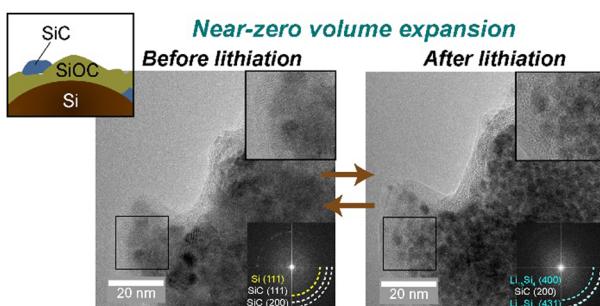
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Simultaneously recorded photochemical action plots reveal orthogonal reactivity

Ishrath Mohamed Irshadeen, Vinh X. Truong, Hendrik Frisch* and Christopher Barner-Kowollik*

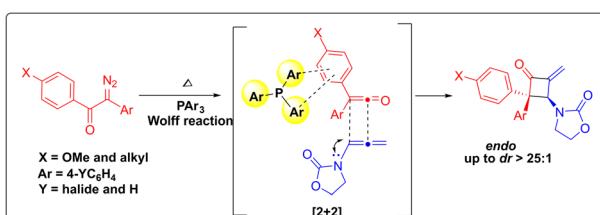
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Near zero-strain silicon oxycarbide interphases for stable Li-ion batteries

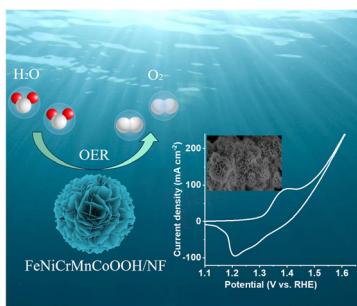
Su Jeong Yeom, Tae-Ung Wi, Soon-Jae Jung, Myeong Seon Kim, Sang-Chae Jeon and Hyun-Wook Lee*

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Stereo- and regiocontrol in intermolecular [2+2] cycloadditions between diarylketenes and allenamides to access substituted α -methylenecyclobutanones

Akshay Suresh Kshirsagar, Sayaji Arjun More and Rai-Shung Liu*

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Nanoflower-like high-entropy Ni–Fe–Cr–Mn–Co (oxy)hydroxides for oxygen evolution

Mingyuan Shi, Tianmi Tang, Liyuan Xiao, Jingyi Han, Xue Bai, Yuhang Sun, Siyu Chen, Jingru Sun, Yuanyuan Ma* and Jingqi Guan*



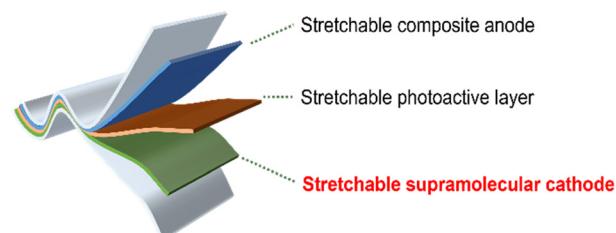
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Supramolecular interface decoration on a polymer conductor for an intrinsically stretchable near-infrared photodiode

Fan Chen, Yiming Li, Yan Chen, Yi-Xuan Wang* and Wenping Hu*

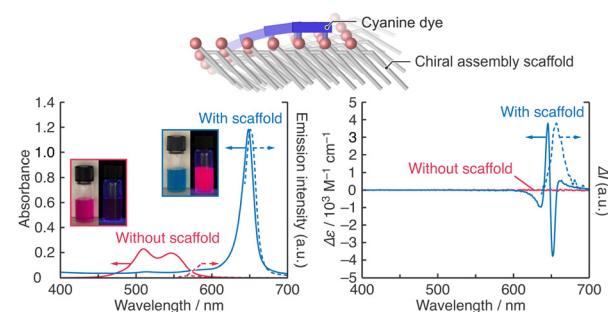
Intrinsically stretchable photodiode



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Controlled packing of chiral assembly scaffolds to promote chiral J-aggregation of carbocyanine dyes

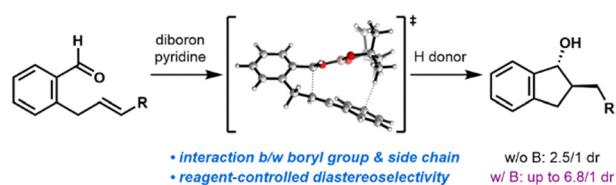
Naoya Ryu,* Yusei Yamamoto, Yutaka Okazaki, Nanami Hano, Yuki Iwamoto, Tomohiro Shiroasaki, Shoji Nagaoka, Reiko Oda, Hirotaka Ihara and Makoto Takafuji



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Stereochemical modulation of ketyl radical cyclization enabled by pyridine-boryl radicals: catalytic diastereoselective synthesis of *trans*-2-alkyl-1-indanols

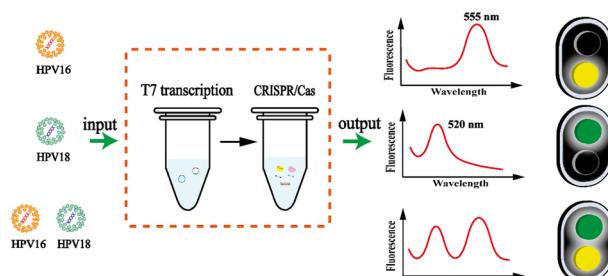
Somi Kim, Junhyuk Jo, Sunggi Lee* and Won-jin Chung*



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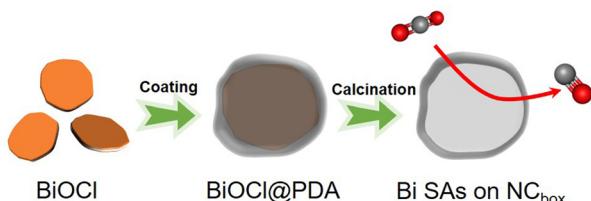
Target-mediated rolling circle transcription coupling with CRISPR/Cas12a-Cas13a for simultaneous detection of HPV16 and HPV18

Shiying Zhou, Shuyu Zhu, Zhen Huang, Jian Chen, Jiawei Li, Mei Yang, Liang Jin,* Danqun Huo* and Changjun Hou*



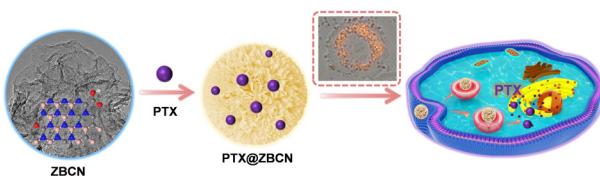
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**N-doped carbon nanocage-anchored bismuth atoms for efficient CO₂ reduction**

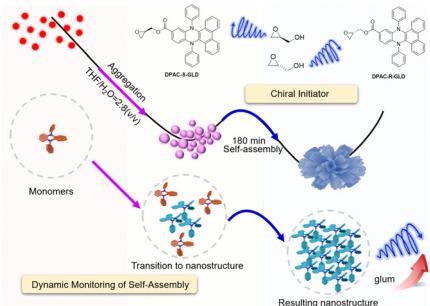
Jiayi Li, Lingling Zhang, Shuai Gao, Xingmin Chen, Runjie Wu, Xiao Wang* and Qiang Wang*

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**Flower-like porous BCN assembled by nanosheets for paclitaxel delivery**

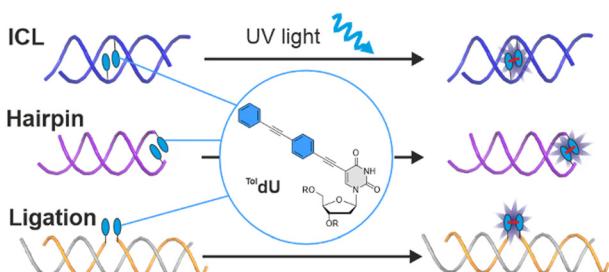
Haiyan Wang, Congling Wang, Yuxian Deng, Yuxin Han, Shuo Xiang, Hanning Xiao and Qunhong Weng*

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**Dynamic monitoring of self-assembly by confining conformational changes of butterfly-motion-based molecules**

Xuanying Chen, Jiacheng Chen, Wenyuan Su, Jianhua Su, Qi Zou* and Zhiyun Zhang*

12003

**A tolane-modified 5-ethynyluridine as a universal and fluorogenic photochemical DNA crosslinker**

Hermann Neitz and Claudia Höbartner*

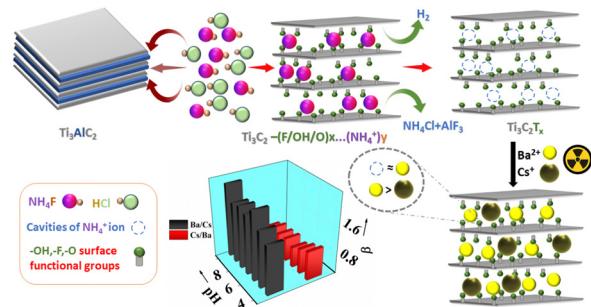


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Application of MXene for remediation of low-level radioactive aqueous solutions contaminated with ^{133}Ba and ^{137}Cs

Vipul Vilas Kusumkar, Shalu Atri,* Süleyman İnan, Maros Gregor, Tomas Roch, Hryhorii Makarov, Maria Caplovicova, Michal Galambos, Eva Viglasova, Gustav Plesch and Olivier Monfort*



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Rapid and sensitive point-of-care PTS-CRISPR assay for food safety monitoring of aflatoxin B1

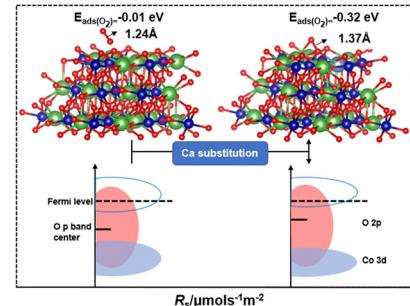
Ziqiang Deng, Jin Zhou, Chaoqun Wang, Jianyu Hu, Rui Liu* and Yi Lv



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Ca substitution improves the catalytic activity of perovskite LaCoO_3 toward toluene: comprehension of electronic structure alteration

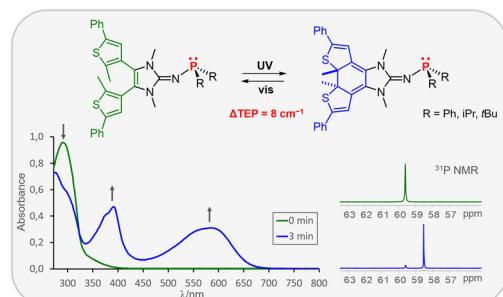
Hanlin Chen, Gaoling Wei, Zijuan You, Xiaoliang Liang,* Peng Liu, Yiping Yang, Fuding Tan, Suhua Wang, Jieqi Xing and Steven L. Suib



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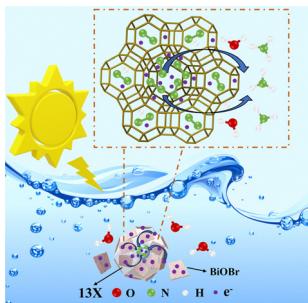
Photoswitchable electron-rich phosphines: using light to modulate the electron-donating ability of phosphines

Florenz Buß, Mowpriya Das, Daniel Janssen-Müller, Alexander Sietmann, Ankita Das, Lukas F. B. Wilm, Matthias Freitag, Michael Seidl, Frank Glorius* and Fabian Dielmann*



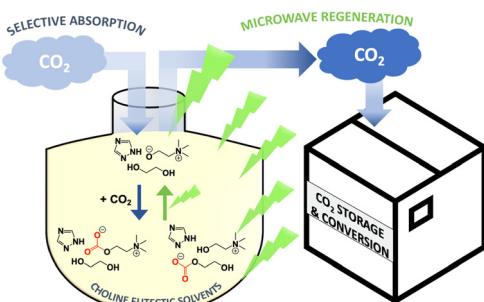
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**The role of 13X molecular sieves in photocatalytic nitrogen fixation**

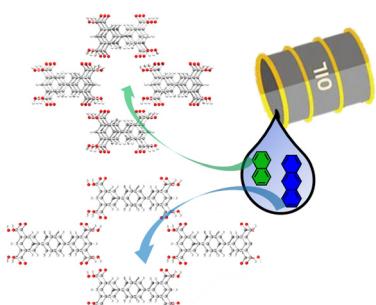
Jianuan Wen, Wei Cai, Zhicheng Zhang, Qin Zhong and Hongxia Qu*

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**Formation of choline salts and dipolar ions for CO₂ reactive eutectic solvents**

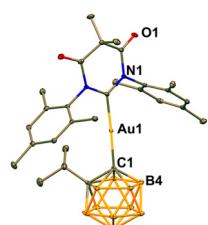
Ruth Dikki, Eda Cagli, Drace Penley, Metin Karayilan and Burcu Gurkan*

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**Selective adsorption of polycyclic aromatic hydrocarbons by isostructural hydrogen-bonded organic frameworks**

Peng Cui,* Qiang Zhu, Fangfang Zhang, Dongni Liu and Wenshuai Zhu*

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**Fast and Bright Phosphorescence****Highly phosphorescent carbene–metal–carboranyl complexes of copper(I) and gold(I)**

Samuel L. Powley, Charlotte Riley, Hwan-Hee Cho, Nguyen Le Phuoc, Mikko Linnolahti,* Neil Greenham* and Alexander S. Romanov*

